

**PENGARUH PROFITABILITAS, LEVERAGE, CAPITAL INTENSITY, DAN
UKURAN PERUSAHAAN TERHADAP AGRESIVITAS PAJAK PADA
PERUSAHAAN SEKTOR PERTAMBANGAN YANG TERDAFTAR DI BURSA EFEK
INDONESIA PERIODE 2015-2018**

**THE EFFECT OF PROFITABILITY, LEVERAGE,
CAPITAL INTENSITY, AND FIRM SIZE ON TAX
AGGRESSIVENESS IN MINING SECTOR
COMPANIES LISTED IN THE INDONESIA STOCK
EXCHANGE PERIOD 2015-2018**

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Abstract— there are varioys factors that can enable companies to do tax aggressiviness. This study aims to examine and determine the effect of Profitability (ROA), Leverage (DAR), Capital intensity and Firm Size on Tax Aggressiviness in mining sector companies period 2015-2018. This research uses a quantitative research strategy with a causal relathionship approach, which is measure using a panel data regression method with Eviews. The population of this study is the ming sector companies listed in the Indonesia Stock Exchange (IDX) period 2015 to 2018. The sample is determinde based on purposive sampling, with a total sample of 15 and total observation in this study becomes 60. The data used in this study are secondary data, e.e annual financial statement published by the IDX and the official website of each company. The result of this study prove that Profitability has a negative effect on Tax Aggressiviness, Leverage does not affect on Tax Aggressiviness, Capital Intensity has a negative effect on Tax Aggressiviness, and Firm Size has a negative effect on Tax Aggressiviness.

Key Word: Profitabilitas, Leverage, Capital Intensity, Firm Size and Tax Aggressiviness.

I. INTRODUCTION

The government was trying to increase public welfare, in one of them by building public facilities. The development of public facilities must be equal in various regions certainly very significant amount of funds for, one of the fund is used by government tax. According to the Law on General Provisions and Tax Procedures Article 1 paragraph 1, tax is a compulsory contribution

to the state owed by an individual or a compelling entity based on law without receiving direct compensation and used for the state's needs for the prosperity of the people.

Through taxes that have been paid by the community, the government does not only run one program for the welfare of the community. The number of programs that will be implemented by the government will achieve the tax function. Taxes have several special functions, namely, as a source of funds for all state activities (Budget Function), regulating state activities related to income and expenditure of funds (Regulating Function), controlling price stability so that economic growth remains good (Stability Function), and financing interests. general public (Income Retribution Function).

These functions will be achieved, making taxes very important for the country. However, it is different from companies that consider taxes to be a burden that will reduce company profits. This encourages the number of companies to be more tax aggressive, where the company wishes to reduce the amount of tax burden that must be paid. Tax aggressiveness can be defined as actions taken by companies to reduce taxable income through tax planning, both legally (tax avoidance) and illegally (tax evasion) (Frank, in Mustika, 2017).

There are many factors that encourage companies to take tax aggressiveness such as profitability, leverage, capital intensity and company size. One of them is profitability, where the profitability ratio is a determining factor for the company's tax burden. Many companies measure their profitability using Return on Assets (ROA), where if the higher ROA value will make the Effective Tax Rate (ETR) High. ETR is a measure used to determine the level of aggressiveness of a company, the higher the ETR value indicates that the level of tax aggressiveness of a company is lower, while the lower the ETR indicates that the possibility of tax aggressiveness in a company. This proves that profitability has an influence on tax aggressiveness in a company.

Phenomena aggressiveness tax other happened to PT .Coca-cola indonesia (CCI) .The swelling the charge on years 2002-2016 that causes contribution over taxes are low , it makes relevant regional suspicious .According to relevant regional , is the difference between taxable income who passed with taxable income that should have paid PT. Coca-Cola Indonesia .The beginning of suspicion relevant regional it rose , for pulmonary promotional costs who do not have a direct link with a product produced .Swelling that cost have reduced taxable income that should have paid by CCI , so as to make the payment of tax his become smaller (kompas.com).

Another tax aggressiveness phenomenon that occurs in the mining sector, namely at PT. Multisarana Avindo (MSA). MSA was sued by the DGT for the transfer of mining rights which resulted in a lack of Value Added Tax (VAT) payment obligations. According to an investigation by KataData and PRAKARSA in 2018, it showed that the DGT allegations were not materially proven, because the practices carried out by PT MSA did not violate the provisions, because the government did not collect VAT on raw coal production. However, because it is considered that there is a transfer of power, there is delivery of taxable goods or services (katadata.co.id). Another tax aggressive phenomenon that has recently occurred in the Indonesian mining sector, namely at PT. Adaro Energy Tbk, which is the leading mining company and the second largest coal producer in Indonesia. International NGO Global Witness published an investigative report on the alleged tax evasion of Adaro Energy companies. The report explains that Adaro is driving its revenue and profits overseas to reduce the taxes paid to the Indonesian government. Global Witness explained that Adaro was selling coal at low prices to a subsidiary in Singapore which would then be resold at a high price. Through this subsidiary of Adaro, Global Witness found the potential for tax payments that should have been paid to be lower at a value of 125 million US dollars (tirto.id).

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II. A LITERATURE STUDY

2.1 Theoretical Framework

Agency Theory

Agency theory is a theory that explains the relationship between the agent (management) and the principal (shareholders) in managing the company. Setyoningrum and Zulaikha (2019) cite an explanation from experts regarding the principal and agent that both parties are utility maximizers, where the agent does not necessarily act according to the principal's primary interest. This is supported by the opinion of Horne (2012: 3) which explains that specifically the goals of management can differ from those of the company's shareholders. These differences in goals and interests can also affect various things related to the performance of the company, one of which is the company's tax policy.

The Indonesian tax system which uses a self-assessment system has the authority for companies to calculate and report their own taxes. The enactment of this system is an opportunity for agents to manipulate tax estimates to be smaller so that the company's tax burden will be smaller. This can be done by the agent because there is a symmetrical information and the agent has more company information than the principal.

Tax

According to Law No 28 of 2007 about General Provisions and Tax Procedures, Taxes are mandatory contributions to the state that are owed by private persons or entities that are compelling based on law without receiving direct compensation and are used for state needs for the greatest prosperity of the people (Resmi: 2017). Taxes have 2 functions, namely, the budgetary function (source of state finance), which means that tax becomes one of the sources of state revenue to finance expenditures, both routine and non-routine, and the second function is the Regularend function as a regulatory tool for implementing government policies in the economic sector. and social and achieve certain goals outside the financial field.

In tax collection, there are several systems that are used, namely: Official Assessment System, which is a tax collection system that provides authority to tax officials to calculate and collect taxes owed, Self Assessment System, which is a collection system that provides authority for taxpayers to calculate and report the tax payable itself, and the With Holding System, which is a collection system that gives authority to a third party or commonly called a tax consultant appointed to calculate and report the tax.

Tax Management

Tax management is a comprehensive effort carried out by individual taxpayers and business entities through the planning, implementation, and control of tax obligations and rights so that they can be managed properly, efficiently and economically, so as to provide maximum contribution to the company (Pohan: 2013). One of the functions of tax management is tax planning, which is a business that includes tax planning so that the tax paid by the company is truly efficient. The main goal is to find various loopholes that can be taken in the corridor of tax regulations (loopholes), so that companies can pay a minimum amount of tax. In tax planning, there are 3 kinds of ways that taxpayers can do to reduce the amount of tax burden, namely: Tax Avoidance, Tax Evasion, and Tax Saving.

Tax activities can reach efficiency and effectiveness, if the function of tax with management to is right and good. But, that is right and good tax implementation is not is by the company. Firms use tax planning with the ultimate aim of it is find different was by a company so as to be in regulation with tax, it can be pay taxes least number.

Tax Aggressiveness

Different views for companies regarding taxes, where the tax for the company is an additional cost burden that can reduce company profits. This predicts the company to take actions that will reduce the company's tax burden. According to Frank (2009, in Mustika, 2017), actions taken by companies to reduce taxable income through tax planning, both legally (tax avoidance) and illegal tax evasion (tax evasion), are called tax aggressiveness. Although not all tax planning violates the law, the more loopholes used to reduce tax payments, the more aggressive the company will be.

According to Chen (2010 in Setyoningrum and Zulaikha, 2019) tax aggressiveness is a company effort to pay taxes using aggressive tax planning and tax avoidance. One of the benefits of companies taking tax aggressiveness is to monitor taxes in order to obtain greater income so that they can be used. to fund corporate investments. Lanis and Richardson (2012, in Gemilang, 2017) explain that many previous studies have used ETR (Effective Tax Rate) in measuring tax aggressiveness. The lower the tax value indicates that there is aggressiveness in the company, the low ETR indicates a lower level of tax burden than pre-taxable income. following the ETR formula:

$$ETR = \frac{\text{Income Tax Expense}}{\text{Income Before Tax}} \quad (1)$$

Profitability

Profitability is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness and efficiency of a company. This is addressed by the profit generated from sales and investment income. The point is that the use of this ratio shows the efficiency of the company (Kasmir, 2018). The purpose of using profitability ratios is to measure and calculate the profit earned in a certain period, assess the company's profit position from the previous year to the current year, assess the progress of profit over time, and measure the productivity of the company's funds used.

One of the formulas that is often used to calculate profitability is Return on Assets (ROA), which is a ratio that shows the results of the total assets used in the company. The return on investments shows the productivity of all company funds. Here's the ROA formula:

$$\text{Return on Total Assets} = \frac{\text{Earnings After Interest and Tax}}{\text{Total Assets}} \quad (2)$$

Leverage

Leverage is the ratio used to measure the extent to which the company's assets are financed with debt, which means how much debt the company bears compared to existing assets (Kasmir, 2018). In a broad sense, it is said that this ratio is used to measure the company's ability to pay all of its obligations, both short and long term if the company is liquidated (liquidated). The company has several objectives in using the leverage ratio, namely, to determine the position of the company against liabilities to other parties (creditors), to assess the company's ability to meet fixed liabilities, to assess the balance between asset value, especially fixed assets and capital, and to assess how much the company's assets are financed by debt.

One type of leverage ratio that is often used is the Debt to Asset Ratio (DAR), a ratio used to measure the ratio between total debt and total assets. In other words, how much the company's assets are financed by debt or how much the company's debt affects asset management. Here's the DAR formula:

$$\text{Debt to assets ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \quad (3)$$

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Capital Intensity

Capital intensity or capital intensity ratio is the investment activity of companies that are placed with investment in fixed assets and inventories (Indradi: 2018). Capital intensity is also defined by how companies sacrifice funds for operating activities and assets in order to get company profits. Mosebach and Ellen (2007, in Gemilang, 2018) state that there are three intensities to measure asset composition, inventory intensity, capital intensity and research intensity and development. In this study, capital intensity is proxied using the ratio of fixed asset intensity, the intensity of fixed assets is not how big the company's fixed assets are in the total assets owned. Capital intensity can be measured using the formula:

$$CAPIN = \frac{\text{Net Fix Assets}}{\text{Total Assets}} \quad (4)$$

Firm Size

Firm Size is a scale used to classify a company according to various ways such as total asset log size, stock market value and others (Rizal, 2018). According to Brigham & Houtsan (2010, in Leksono et. Al, 2019) firm size is the size of a company that is shown or valued by total assets, total sales, total profit, tax expense and others. The size of the company is classified into 4, namely, micro companies, small companies, medium enterprises, and large companies. The formula used to measure company size is:

$$\text{Size} = \ln \text{Total Asset} \quad (5)$$

2.2 Hypothesis Development

Effect of Profitability on Tax Aggressiveness

ROA is one approach that can reflect the profitability of a company which shows that the amount of profit obtained from the use of total assets owned. The higher this ratio, the better the company's performance in utilizing assets to obtain net income. According to Ayem and Setyadi (2019), profitability is a determining factor for the company's tax burden. The higher the profitability, the higher the tax burden to be paid, so that companies tend to take tax aggressiveness.

Previous research conducted by Leksono et. al (2019) stated that profitability which is proxied by ROA has a negative effect on tax aggressiveness. The higher the profitability, the higher the ETR value, which reflects the lower tax aggressiveness. The higher the profitability of the company will make the resulting net profit increase, companies with a high level of profitability will always obey tax payments. Meanwhile, companies that have a low level of profitability will not obey company tax payments to keep their profits from decreasing.

H1: Profitability affects on tax aggressiveness

The Effect of Leverage on Tax Aggressiveness

The higher the relationship between the company and the creditors, the more the company will increase the profit for the current period with the aim of maintaining the company's performance through profit (Gemilang, 2017). The higher the interests of the company with creditors, the creditors will be closer to the company for the sustainability of external capital. Companies with a high degree of leverage will not be aggressive towards their tax payments because companies are trying to keep their profits engaged with creditors.

Previous research conducted by Hidayat and Fitria (2018) stated that influence has an influence on tax aggressiveness. Based on agency theory, debt can be used by managers to bear corporate tax costs by utilizing interest costs from debt. In the taxation regulations article 6 paragraph 1 Law no. 36 of 2008 concerning Income Tax, loan interest is a deductible expense against the taxable stage. Interest expenses that are deductible expansions will reduce the

company's tax profit. Thus, the greater the value of the leverage ratio, the greater the amount of funding that comes from third parties. This will increase the interest expense that must increase the company, and can cause less tax borne by the company.

H2: Leverage effect on tax aggressiveness

Effect of Capital Intensity on Tax Aggressiveness

Capital intensitas often associated with how big the fixed assets owned company and supplies. Assets still result in a reduction in the tax charges must be paid the depreciation fixed asset. Fixed assets owned by company having to economic time span the shrinkage on every year. Will be subtracting the depreciation profit before tax then the burden of a tax paid will be reduced. This proved that company with the fixed assets smaller having the more aggressive than to the payment of tax with a company that has asset greater.

Previous research conducted by mustika (2017) stated that capital intensity significant influence on aggressiveness. taxThis explains that capital intensity are often associated with a total assets can lead to a reduced tax burden must be paid the company. The fixed assets owned by its own economic age that would cause the burden of shrinkage on every year. The burden of the depreciation severed profit before tax so that the tax paid will be reduced.This proved that the company with the fixed assets smaller ones have the possibility of more aggressive with tax payments compared with a company that has assets bigger.

H3: Capital Intensity effect on tax aggressiveness

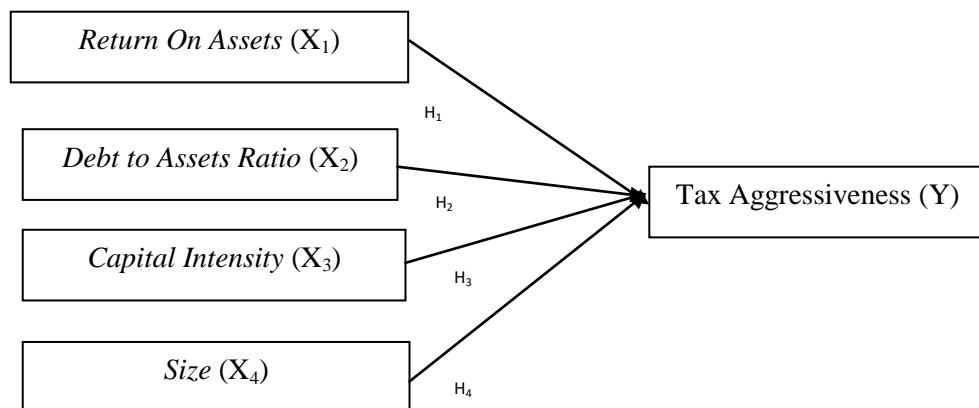
Effect of Firm Size on Tax Aggressiveness

Size of the company can be defined as a scale which the company classified major or minor of all viewpoints , one of them is assessed in the amount the company assets. Size of the company can determine the amount of the assets , the larger assets is the company increased productivity .Will generate profit increased productivity and greater cooperation and of course affect the taxes that should be paid.

Previous research conducted by Setyoningrum and Zulaikha (2019) stated that company size has an influence on tax aggressiveness. This shows that the effect of company size on tax aggressiveness is caused by large assets and abundant resources. The existence of large assets with lots of resources will make the company more productive and have an impact on increasing assets. This makes company size one of the influences of the company on the level of tax aggressiveness. The greater the company's assets owned, the greater the depreciation expense. The depreciation expense can reduce the net profit received by the company, so that the amount of tax burden that must be paid is lower.

H4: Firm Size effect on tax aggressiveness

Based on the development of the above hypothesis, the following conceptual framework can be described:



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Picture 2.1 : Conceptual Framework

Information :————→ Partially

III. RESEARCH METHOD

This study uses a strategy that has a causal nature with a quantitative approach technique. Research with causal relationships is a causal relationship that has independent variables and dependent variables (Sugiyono, 2018: 64). The data used in this study is secondary data, namely, data obtained in finished form, has been processed by others and is usually in the form of publication. Data collection techniques are carried out by collecting information from literature in libraries and documentation techniques, namely financial reports which can be downloaded at <https://www.idx.co.id/>. The study population was 50 mining sector companies listed on the IDX for the 2015-2018 period, with a sample of 15 companies.

The data that has been obtained are analyzed quantitatively to test the research hypothesis with statistical methods. The data analysis technique used in this research is panel data regression technique, namely, a combination of time series and cross section using Eviews software. The general form of the panel data regression equation model used is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \dots (6)$$

Information:

Y = Tax Aggressiveness

α = Constant

β_1 = Profitability regression coefficient

X_1 = Profitability

β_2 = Leverage regression coefficient

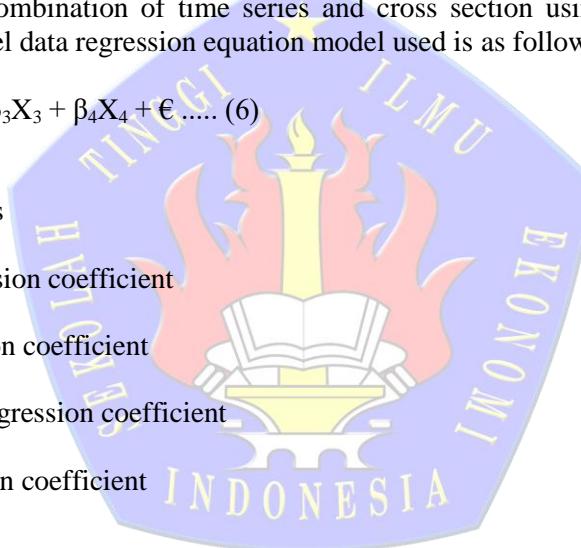
X_2 = Leverage

β_3 = Capital Intensity regression coefficient

X_3 = Capital Intensity

β_4 = Firm Size regression coefficient

X_4 = Firm Size



IV RESULT

4.1 Descriptive Statistics

From the results of descriptive statistical testing on five variables with a research sample of 60, the results of descriptive statistics are obtained according to the table below:

Table 1
Descriptive Statistics Test Results

	Tax Aggressiveness	Profitability	Leverage	Capital Intensity	Firm Size
Mean	0.36115	0.099417	0.407383	0.43545	29.176
Maximum	0.914	0.394	0.69	0.702	32.258
Minimum	0.22	0.01	0.145	0.082	22.373

Std. Deviasi	0.144333	0.095342	0.129552	0.156976	1.533814
Observations	60	60	60	60	60

Source: Panel Data Regression output with Eviews version 9

From the results above, it can be seen that the tax aggressiveness variable shows a minimum value of 0.22 owned by PT Citatah Tbk in 2016. The maximum value is 0.914 owned by PT Darma Henwa Tbk in 2015. The average value of tax aggressiveness is 0.36115, that 36,115% of companies in the mining sector undertake tax aggressiveness. The standard deviation is 0.144333, the standard deviation has a smaller value than the average which indicates that the average value can provide a good representation of the overall data.

The independent profitability variable obtained a minimum value of 0.01 owned by PT Darma Henwa in 2015 and 2016, while the maximum value of 0.394 was owned by PT Baramulti Suksessarana Tbk in 2017. The average profitability value was 0.099417, indicating that on average -The average mining company earned a fairly low profit compared to other sectors, namely, amounting to 9.9417%. The standard deviation value is 0.095342, this shows that the average value is greater than the standard deviation which can indicate that the average value can provide a good representation of the overall data.

The independent leverage variable obtained a minimum leverage value of 0.145 owned by PT Resources Alam Indonesia in 2016, while a maximum value of 0.69 owned by PT Radiant Utama Interinsco in 2016. The average leverage value is 0.407383, which indicates that The average mining sector company uses its own source of equity debt which reaches 40.7383%. The standard deviation value is 0.129552, this shows that the average value is greater than the standard deviation which can indicate that the average value can provide a good representation of the overall data.

The independent capital intensity variable obtained a minimum value of 0.082 owned by PT J Resources Asia Pasifik Tbk in 2015, while the maximum value of 0.702 owned by PT Golden Energy Mines Tbk in 2017. The average value of the capital intensity variable was 0, 43545, which indicates that the level of efficiency in the use of capital to fixed assets in mining companies is still low, namely 43.545%. The standard deviation value is 0.156976, this shows that the average is greater than the standard deviation which can be ignored that the average value can represent the overall data well.

The independent variable firm size obtained a minimum value of 22,373 owned by PT Citatah Tbk in 2018, while a maximum value of 32,258 owned by PT Adaro Energy Tbk in 2018. The average value of company size in the mining sector is 29,176, which shows that the company has an average total asset value below Ln 29,176 is a small-scale company compared to other sector companies that have a total asset value above Ln 29,176. The standard deviation value is 1.533814, this indicates that the average value is greater than the standard deviation which indicates that the average value can represent the overall data well.

4.2 Classic Assumption Test

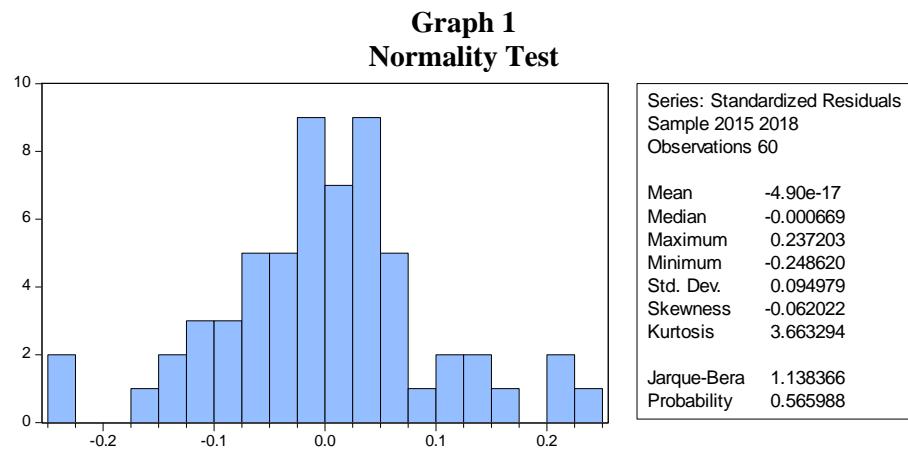
1. Normality Test

The normality test aims to test whether in the regression model, the dependent variable and the independent variable both have a normal distribution or not. The data normality in this study was tested using the Kolmogorov-Smirnov test. A distribution is said to be normal if the significance value of the Kolmogorov-Smirnov test results shows a greater value when compared to the value of the degree of confidence used, namely 5% (0.05).

If the significance value of the Kolmogorov-Smirnov test is smaller than the degree of confidence used, the data has an abnormal distribution pattern (Ghozali, 2018: 161). In addition to testing the KolmogorovSmirnov test, one way to see the normality of the data is by looking at the

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distribution of data (points) on the diagonal axis of the graph or by looking at the histogram of the residuals.



Source: Panel Data Regression output with Eviews version 9

The results of the histogram graph above show a probability value greater than 0.05, namely, $0.565988 > 0.05$, which means that the data in the study were normally distributed.

2. Multicollinearity test

Ghozali (2018: 107) states that the multicollinearity test aims to test whether the regression model finds availability between independent (independent) variables. Regression models that should not occur among the independent variables, monitoring the presence or absence of multicollinearity in the regression model are:

- If the problem value is > 0.80 then multicollinearity occurs;
- If the value < 0.80 , multicollinearity does not occur.

Table 2
Multicollinearity Tset

	Profitability	Leverage	Capital Intensity	Firm Size
Profitability	1	-0.37025562	0.23951142	0.18964557
Leverage	-0.37025562	1	-0.30115966	0.4304686
Capital Intensity	0.23951142	-0.30115966	1	-0.34393446
Firm Size	0.18964557	0.04304686	-0.34393446	1

Source: Panel Data Regression output with Eviews version 9

Based on the results from the table above shows that the independent variables profitability, leverage, capital intensity and company size are free from the multicollinearity test because they have a value below 0.80.

3. Heteroskedastitas test

The heteroscedasticity test aims to test whether in the regression model the variance inequality is from the remainder of one observation to another (Ghozali, 2018). How to handle heteroscedasticity or not in this study is to use the Whites test. The basis for making a decision to determine there is no heteroscedasticity problem, namely, if the Chi-Squared Probability value on Obs * R-squared is less than 0.05, then a heteroscedasticity problem occurs and if the Chi-Squared

Probability value on Obs * R-squared is greater than 0.05, then there is no heteroscedasticity problem.

Table 3
Heteroskedastitas Test

Heteroskedasticity Test: White

F-statistic	1.653923	Prob. F(14,45)	0.1011
Obs*R-squared	20.38437	Prob. Chi-Square(14)	0.1185
Scaled explained SS	28.08347	Prob. Chi-Square(14)	0.0139

Source: Panel Data regression output with Eviews Version 9

Based on the results shown in the table above, there is no heteroscedasticity which is indicated by the chi square probability value on Obs * R-Squared is greater than the significant value, namely, $0.1185 > 0.05$.

4. Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a confounding error in period t with a confounding error in period t-1 (Ghozali, 2018). A good regression model is a regression that is free from autocorrelation, to test for the presence or absence of autocorrelation symptoms it can be detected by the Durbin-Watson test (DW Test). Decision making whether autocorrelation occurs or not is as follows:

- A. Whereas the DW value lies between the upper limit or upper limit (du) and (4 - du), then the autocorrelation coefficient is zero, there is no autocorrelation.
- B. If the DW value is lower than the lower limit or lower limit (dl), then the autocorrelation coefficient is greater than zero, meaning there is positive autocorrelation.
- C. The value of DW value is greater than the lower limit or lower limit (4-dl), then the autocorrelation coefficient is smaller than zero, meaning there is negative autocorrelation.
- D. If the DW value lies between the upper limit (du) and the lower limit (dl) or lies between (4-du) and (4-dl), the result cannot be rejected.

Table 4
Autocorrelation Test

Dependent Variable: AGRESIVITAS_PAJAK
Method: Panel EGLS (Cross-section random effects)
Date: 07/02/20 Time: 14:51
Sample: 2015 2018
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60
Swamy and Arora estimator of component variances

R-squared	0.452553	Mean dependent var	-0.181871
Adjusted R-squared	0.412739	S.D. dependent var	0.082590
S.E. of regression	0.063291	Sum squared resid	0.220319
F-statistic	11.36661	Durbin-Watson stat	1.968725
Prob(F-statistic)	0.000001		

Source: Panel Data regression output with Eviews Version 9

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Based on the test results in the table above, the DW value is 1.968725. The dl value and can be seen by looking at the Durbin-Watson table, with $\alpha = 5\%$, $n = 60$ and $k = 4$, then the dl value is 1.4443 and the du value is 1.7274. The most appropriate criterion to use is $du < dw < 4 - du$ which means there is no positive or negative autocorrelation, where the DW value obtained is 1.7274 $< 1.968725 < 2.2726$.

4.3 Panel Data Regression Analysis

**Table 5
Result of Panel Data Regression Analysis and t Test**

Dependent Variable: AGRESIVITAS_PAJAK
Method: Panel EGLS (Cross-section random effects)
Date: 07/02/20 Time: 14:51
Sample: 2015 2018
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PROFITABILITY	-0.133486	0.024224	-5.510434	0.0000
LEVERAGE	0.065994	0.100511	0.656589	0.5142
CAPITAL_INTENSITY	-0.156746	0.093435	-2.677590	0.0491
FIRM SIZE	-0.786202	0.656031	-2.998422	0.0359
C	0.476111	0.957893	0.497040	0.6211

Source: Panel Data regression output with Eviews Version 9

Based on the results of the panel data regression analysis above, the panel data regression equation can be formulated as follows:

$$\text{TAX AGGRESSIVENESS} = 0.476111 - 0.133486 \text{ PROFITABILITY} + 0.065994 \text{ LEVERAGE} \\ - 0.156746 \text{ CAPITAL INTENSITY} - 0.786202 \text{ FIRM SIZE}$$

Based on the regression equation above, it can be analyzed that:

1. A constant of 0.476111, which means that if the value of Profitability, Leverage, Capital Intensity and Company Size is 0, then the tax aggressiveness is 0.476111.
2. The profitability variable has a coefficient value of -0.133486, the negative result illustrates that any increase in profitability will reduce the tax aggressiveness of 0.133486.
3. The leverage variable has a coefficient value of 0.065994, this positive result illustrates that each increase in leverage will increase tax aggressiveness by 0.065994.
4. The intensity of the capital variable has a coefficient value of -0.156746, the negative result illustrates that any increase in capital intensity will reduce tax aggressiveness by 0.156746.
5. The firm size variable has a coefficient value of -0.786202, the negative result illustrates that any increase in company size will reduce tax aggressiveness by 0.786202

4.4 Hypothesis Test

1. T Test

The t statistical test aims to determine how much influence the independent variable partially affects the dependent variable. Determining whether the hypothesis is accepted or rejected is by comparing tcount with ttable and the significance value, the significance value used by the writer is

$\alpha = 5\% = 0.05$. If the value of tcount > ttable with a value of sig < 0.05 then the independent variable has an influence on the dependent variable, if tcount < ttable with a value of sig > 0.05 then the independent variable has no influence on the dependent variable. It is known that the number of studies (n) = 60, the number of independent variables (k) = 4, then the formula for degree of freedom (df) = nk-1 is 60-4-1 = 55, with df 55 and a significance level of 0.05 then the t table is 2.004045.

Based on the explanation and table 5 above, the resulting hypothesis is as follows:

1. The first hypothesis (H1) in this study is profitability which affects tax aggressiveness. The results of statistical tests show that the probability value of 0.0000 is smaller than the significance level of 0.05, this indicates that profitability has an effect on tax aggressiveness. This happens with the results of t count greater than t table (-5.510434 > 2.00404). Thus H1 is **accepted**, so it can reject that profitability has a negative effect on tax aggressiveness. This happens if Profitability experiences a revival will reduce Tax Aggressiveness. In contrast to the research of Ayem and Setyadi (2019) which states that the Profitability variable has a positive effect on tax aggressiveness, which means that if profitability is high it will increase tax aggressiveness. The difference in research can be seen from the probability value and the resulting tcount, in Ayem and Setyadi's research (2019) the results of the tcount are positive, while the results of the author's research are negative.
2. The second hypothesis (H2) in this study is that leverage affects tax aggressiveness. The results of statistical tests show that the probability value of 0.5142 is greater than the significance level of 0.05, this indicates that Leverage has no effect on Tax Aggressiveness. This happens with the result of t count is smaller than the result of t table (0.656589 < 2.00404). Thus, H2 is **rejected**, so it can reject that Leverage has no effect on Tax Aggressiveness. This explains that the large or small level of leverage of mining companies does not have an effect on tax aggressiveness. Leverage does not affect tax aggressiveness due to various factors in the company, one of which is that if the company uses too much debt it will reduce the level of investor confidence, where investors do not want to take big risks. In contrast to the research of Hidayat and Fitria (2018) which states that the leverage variable has an effect on tax aggressiveness, which means that if the debt is greater, the interest expense advised will be greater, thereby reducing the tax burden that must be supervised. This difference can be seen from the results of the probability value obtained by Hidayat and Fitria (2018) which is smaller than the significance value, while the probability value from the author's research results is greater than the level of significance.
3. The third hypothesis (H3) in this study is that Capital Intensity has an effect on Tax Aggressiveness. The result of statistical test shows that the probability value of 0.0491 is smaller than the significance level of 0.05, this indicates that capital intensity has an effect on tax aggressiveness. It runs with the result of t count greater than the result of t table (-2.677590 > 2.00404). Thus H3 is **accepted**, so that it can reject that capital intensity has a negative effect on tax aggressiveness. This suggests that if the capital is high intensity will reduce tax aggressiveness. In contrast to Mustika's research (2017) which states that capital intensity has no effect on tax aggressiveness, it can be seen from the results of the probability value obtained which is greater than the level of significance.
4. The fourth hypothesis (H4) in this study is that firm size has an effect on tax aggressiveness. The results of statistical tests show that the probability value of 0.0359 is smaller than the significance level of 0.05, this indicates that company size has an effect on tax aggressiveness. This happens with the result of t count is greater than the result of t table (-2.998422 > 2.00404). Thus H4 is accepted, so it can be denied that Company Size has a negative effect on Tax Aggressiveness. This

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suggests that a large company size will reduce tax aggressiveness. In contrast to the research of Ayem and Setyadi (2019) which states that the variable company size has a positive effect on tax aggressiveness, which means that large company size will increase tax aggressiveness. The difference in research can be seen from the probability value and the resulting tcount, in Ayem and Setyadi's research (2019) the results of the tcount are positive, while the results of the author's research are negative.

2. Determination Coefficient Test

Table 6
Result Determination Coefficient Test

Dependent Variable: AGRESIVITAS_PAJAK
Method: Panel EGLS (Cross-section random effects)
Date: 07/02/20 Time: 14:51
Sample: 2015 2018
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60

R-squared	0.452553	Mean dependent var	-0.181871
Adjusted R-squared	0.412739	S.D. dependent var	0.082590

Source: Panel Data regression output with Eviews Version 9

Based on the table above, the coefficient of determination as seen from the adjusted R2 is 0.412739 or 41.2739%. It can be concluded that the independent variable is able to explain the dependent variable by 41.2739%, while the remaining 58.7261% is explained by other independent variables which are not used in this research model.

V. CONCLUSION AND SUGGESTION

Conclusion

Based on the interpretation of the results of the research that has been done, the following conclusions can be drawn:

1. Profitability, which is proxied as Return on Assets, has an effect on tax aggressiveness. The profitability coefficient is negative, which indicates that when the profitability increases, it will cause tax aggressiveness to decrease.
2. Leverage that is proxied to be Debt to Asset has no effect on Tax Aggressiveness. The Leverage coefficient is positive, which shows that when Leverage increases it will cause Tax Aggressiveness to increase.
3. Capital Intensity affects Tax Aggressiveness. The Capital Intensity coefficient is negative, which indicates that when the Capital Intensity increases, it will cause Tax Aggressiveness to decrease.
4. Firm Size affects tax aggressiveness. The firm size coefficient is negative, which indicates that when the firm size increases, it will cause tax aggressiveness to decrease.

Suggestion

Based on the above conclusions, suggestions that can be taken from the research results are as follows:

1. For further researchers who are interested in conducting research on the same topic, are asked to use other independent variables, such as ownership structure, corporate governance and liquidity.
2. For researchers who use effective tax rates to measure tax aggressiveness, the tax burden demand used is the current tax burden.

3. For investors who are more careful to push, because companies that are tax aggressive may be aggressive towards their financial reporting.
4. Companies are expected to have more awareness and discipline towards their tax obligations and not look for loopholes for tax aggressiveness.
5. The Directorate General of Taxes is expected to be able to make policies that regulate tax aggressiveness and conduct taxpayer database checks.

Research Limitations

Limitations of research to obtain references and current report data, which have an impact on not updating the information provided from the research results. Future research can develop research on the same topic as the current year and sectors that have a greater influence on increasing tax payments.



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